

China

China is the world's largest construction market and has a solid government commitment to increased sustainable construction amid rising urbanization. The United States is China's second largest source of imports for the Sector Group, with a 13 percent import market share. U.S. exports to China are expected to continue to grow in all Group subsectors through 2017. Conducting sales promotion in first- and second-tier cities and understanding regulatory requirements and promotional opportunities may help U.S. exporters expand sales in traditional and green building markets.

Overall Rank	HVACR	Insulation	Lighting
3	4	5	4
Doors & Windows	Plumbing	Glass	Wood
5	8	70	1

China is expected to maintain its position as the world's largest construction market for the near future, and is expected to account for a significant share of all new global construction between now and 2020. The Chinese central Government's National New-type Urbanization Plan for 2014-2020 seeks to increase the percentage of China's population living in cities to 60 percent by 2020, driving continued demand for more sustainable construction.

China's Increasing Emphasis on Green Building

As it works to conserve resources and reduce its greenhouse gas emissions, China explicitly acknowledges the contributions that new building construction can make in achieving its national strategic priorities in these areas. China has developed a comprehensive policy approach to green building over the past decade, with efforts intensifying in recent years. Driven by pollution concerns, broad energy efficiency interests, rising public awareness of green benefits, and increasing disposable incomes, this policy momentum is expected to create extensive new opportunities for U.S. sector exporters.

In 2006, China's Ministry of Housing and Urban-Rural Development (MOHURD) introduced a 3-Star green building rating system for residential and public buildings. This rating system rewards performance in land, energy, water, and material savings, as well as indoor environmental quality and operation and management criteria.

In 2013, the State Council launched its Action Plan for Green Buildings, which sets a goal of making twenty percent of all new building construction compliant with specific green building requirements, among other objectives. In support of the Action Plan for Green Buildings, the Government is developing a comprehensive set of seventeen Chinese standards governing land, energy, water, and materials savings, ambient and indoor environment requirements, and other functional requirements. These standards cover building planning and design, construction, retrofit, operation and maintenance, and demolition. After 2014, all Government-invested construction and public buildings greater in size than 20,000 m² must comply with Chinese green building standards.

In its 12th Five Year Plan (2011-2015), China set a goal of a 45 percent reduction in carbon dioxide emissions per unit of gross domestic product (GDP), which is recognized as unachievable without significant improvement in the energy efficiency of the country's building stock. Among the tools used in China to increase the energy efficiency of buildings are:

- Mandatory building energy codes for commercial and residential buildings in cities;
- Policies to encourage retrofits in existing buildings;
- National, provincial, and city-level financial incentives for energy efficiency level achievement;
- Appliance standards; and
- A phase-out of incandescent light bulbs in favor of more efficient options.

Across China, individual provinces and cities have established their own policies to increase sustainable construction in alignment with national goals. Growth of green building in China has followed a classic east-to-west movement, with eastern coastal first-tier cities leading the movement, followed by second-tier and third-tier cities moving westward over time. These second and third-tier cities will be important sources of building product demand in China.

Building Product Standards and Conformity Certification

U.S. building product exporters must be in a position to achieve China Compulsory Certification (CCC) for covered products to certify conformance with Chinese product standards. Obtaining detailed information about relevant requirements is an important step for U.S. exporters. Also, where product-specific Chinese standards do not exist, there may be opportunities for U.S. exporters to work with Chinese authorities to inform standards development.

Product-level Promotion

At the product level, there are a number of Chinese procurement list resources that may be useful to U.S. exporters in promoting their products. Among these:

- National Development and Reform Commission (NDRC) - Catalog of Energy Efficient Products for Government Procurement. Covers categories such as HVAC, lighting equipment, windows, and glass, among others.
- MOHURD - Building Material Procurement Platform for Low-Income Housing database. This covers sector products such as insulation, doors and windows, and a number of other building products.
- MOHURD – Catalog of Green Building Materials and Products
- China Quality Certification Center (CQCC) – Catalog of Energy Efficient and Water Saving Products for Public Institutions
- CQC – Catalog of Energy Efficient Equipment and Technology Services for Business

Challenges & Barriers to Sector Exports

U.S. sector exporters enjoy strong brand recognition and a reputation for high product quality and reliability in China. The following types of challenges often constrain U.S. exporters' market development.

Highly competitive market environment

U.S. sector exporters compete in the China market against leading global manufacturers that are renowned for product quality and innovation. To win sales often requires regular direct engagement with buyers, to distinguish specific product performance vs. competitors'. Provision of strong after-sales support can be another important element in achieving sales in China.

To maximize impacts, sales promotion at trade events is best undertaken on a subsector specific basis to ensure focused engagement with potential buyers and specific discussion of a product's performance attributes and technical requirements, as well as the supplier's post-sales support capabilities.

Complex regulatory environment

China's construction arena is heavily regulated, which leaves it subject to potential change without significant warning from Chinese authorities. Without a strong local presence or local partners, understanding regulatory complexities poses a challenge to U.S. exporters. Detailed knowledge of the product standard and conformity assessment process is of particular importance to sector exporters.

In this context, public-private partnership models of export program development have proven successful since the Government-to-Government interface provides opportunities for leverage.

China's regulatory environment also means it can be helpful for U.S. exporters to obtain detailed information on sector-specific regulatory requirements. In particular, information on standards and conformity assessment requirements is key.

Business customs

The commercial landscape in China features cultural and political features that demand investment in longer-term business relationships. Sales are typically not made and sustained until after a business becomes recognized in the marketplace as having products well-suited to Chinese buyers, backed by local relationships. Provision of strong after-sales support is essential to maintaining and growing business in China.

Geographic size and diversity

Market information is best tailored to specific locations and product types to be of real use.

Figure 1: U.S. Building Product Exports to China (2013)

	China Import Market Size (2013)	U.S. Share of Import Market	U.S. Rank as Source of Imports
Sector Group (Total)	\$37,973,558,066	13.01%	#1
HVACR	\$13,530,329,259	12.24%	#3
Lighting	\$2,410,504,436	6.52%	#6
Wood	\$18,040,717,594	13.31%	#2
Plumbing	\$847,322,215	7.96%	#6
Insulation	\$519,254,876	19.38%	#2
Windows & Doors	\$89,769,758	5.71%	#6
Glass	\$2,535,659,928	21.8%	#3

Source: UN Comtrade

Choices must be made by exporters as to which trade promotion events to pursue in a vast country with many first- and second-tier cities to address.

For exporters unable to attend multiple trade promotion events, information on how to have products included in potentially important procurement lists and databases may be beneficial.

IPR Protection

Some U.S. exporters within the Sector Group have reported finding products on the market in China with forged certification stamps and seals and with misrepresentations of product performance or other forms of improper labelling. The suite of U.S. Government resources available to U.S. exporters related to IPR issues is included in the Executive Summary and Findings section of this report.

Tariffs

Understanding the duty applied to U.S. products upon import to China is an important aspect of assessing competitiveness for U.S. exporters. The U.S. Government is vigilant in seeking opportunities for the U.S. to achieve duty-free or reduced-duty status for exports to China.

Opportunities for U.S. Companies

Addressing the above types of barriers may help U.S. exporters improve their share of the China market. This section provides a review of the current state of play and competitive landscape, suggesting where there may be the greatest room for growth.

Looking at the Sector Group as a whole, in 2013 U.S. sector exporters took the lead over all international competitors, notably edging ahead of Japan, which long

had occupied the leading import market share position. Japan now trails the U.S. slightly at 11 percent market share, followed by Germany (9.7 percent), Russia (7.5 percent), and Canada (5.7 percent). A view of each subsector individually gives a more informed sense of the competitive environment.

HVACR

China is the world's largest HVACR market. There is strong demand for high-quality HVACR products in China, with exporters from Germany, Japan, the U.S. and Korea claiming 60 percent of the import market. The United States is the third largest source of subsector imports, with a 12 percent market share. Germany leads the market, with just over 20 percent, followed by Japan, at nearly 19 percent. Korean subsector products rank fourth.

Lighting

Lighting represents an enormous area of opportunity for U.S. subsector exporters. Government authorities throughout China are working to encourage energy efficient retrofits of buildings, in which lighting is widely viewed as a "low hanging fruit" investment option to increase energy performance. U.S. lighting exporters have room to grow their share of the China market, currently at just 6.5 percent. Performing ahead of U.S. exporters are Japan (24 percent share), Germany (17 percent), Korea (8.9 percent) and Taiwan (8.7 percent).

Wood

China represents an enormous market opportunity for U.S. wood products exporters, who currently claim 13.3 percent of the import market and are the second largest source of subsector imports after Russia (16 percent) and just ahead of Canada (12 percent). China's demand for wood and wood products has

shown extremely strong growth, with that trend expected to continue through 2017. While Chinese importers have shown strong interest in importing logs or least-processed wood and undertaking value-added production in China, U.S. exporters have tremendous opportunities in higher value-added wood product sales.

Plumbing

There is ample room for growth in U.S. plumbing exports to China, which are the fifth largest foreign source of imports with 8 percent of the market. Plumbing imports in China are dominated by Japan, which holds a 22 percent market share, followed by Korea (13.2 percent), Germany (13 percent) and Taiwan (9.5 percent).

Insulation

U.S. exporters have steadily been gaining import market share in China's insulation market and now stand a close second to Japan at 19.4 percent market share. Japan leads the import market with just over 20 percent share, and Taiwan (10.3 percent), Germany (6 percent) and Korea (5.8 percent) round out the top five foreign sources of subsector imports.

Windows and Doors

There are solid opportunities for growth in U.S. window and door exports to China, which currently rank sixth in import market share at 5.7 percent. Germany leads the import market, claiming fully 30 percent, followed by Korea (9.2 percent), Taiwan (8.9 percent), Norway (8 percent), and Italy (6.3 percent).

Glass

U.S. exporters enjoy a healthy 22 percent share of China's glass import market, ranking third as the source of imports. Japan and Taiwan out-compete U.S. exporters, with 30 percent and 28 percent of the import market respectively.

Resources for U.S. Exporters

Please visit www.export.gov/china for information from U.S. Commercial Service (CS) China, including

- Market research
- Trade events
- Trade leads
- Services available to U.S. companies
- Contact information for CS offices in Beijing, Chengdu, Guangzhou, Shanghai, Shenyang and Wuhan

- Info on subscribing to regular updates or connecting on social media
- Other information to assist U.S. exporters with China export market development

Inquiries regarding export to China may be directed to the China Business Information Center, chinabiz@trade.gov

Upcoming Building Sector Trade Events for U.S. Exporters Interested in China

- U.S.-China Build Trade Mission with Evergreen Building Products Association – November 2015
- China Refrigeration trade show – April 2016
- Guangzhou International Lighting Expo trade show, with U.S. Pavilion – May 2016
- U.S.-China Build Trade Mission with Evergreen Building Products Association – May 2016



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